Measuring parents' developmental goals for their children: Updating Kağitçibaşi's approach to autonomy-relatedness in the United States and China

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Abstract:

Although many scholars continue to describe cultural differences in terms of the individualism–collectivism distinction, unidimensional measures seem unlikely to capture the richness of cultural variation in parents' socialization goals for their children. Kağıtçıbaşı's (2009) theoretical model consists of a bidimensional approach with agency (autonomous to heteronomous) considered orthogonal to interpersonal distance (related to separate), yielding four quadrants. Kağıtçıbaşı argued that countries like the United States fit into the autonomous-separate quadrant, traditional "majority-world" cultures into the heteronomous-related quadrant, and educated urbanized cultural groups in majority-world societies into the autonomous-related quadrant. Given conceptual problems with the scales Kağıtçıbaşı used to measure these constructs, we developed, piloted, and validated the Related–Autonomous–Separate–Heteronomous (RASH) Scale and examined its psychometric properties and measurement invariance in a sample of Chinese ($N = 464$) and North American ($N = 635$) parents. Our results suggest that the four types of parental developmental goals (relatedness, separation, autonomy, and heteronomy) are not as neatly related as Kağıtçıbaşı's model assumes; specifically, the Chinese and North American parents in our study highly valued both autonomous and related developmental goals. Our validation of the RASH scale is an important first step to develop a more appropriate measure of parental socialization goals for cross-cultural investigation.

Keywords: Parents' developmental goals | Socialization | Cross-cultural study | US and China | Individualism–collectivism | Kağıtçıbaşı | Autonomy-relatedness

Article:

It has long been recognized that cultural groups differ, in some cases markedly, in terms of their child-rearing values, beliefs, and practices (Cole 1996; Rogoff 2003; Tudge 2008; Valsiner and Rosa 2007). Many psychologists interested in cultural variations have grouped cultures together for ease of comparison. One of the most widely used grouping concepts is that of individualism/collectivism (Hofstede 2001; Triandis 1995); a second is that of independence/interdependence (Markus and Kitayama 1991). Individualism and collectivism are portrayed as two cultural models whereas independence and interdependence are viewed as different cultural conceptions of the self. Both, however, are treated as unidimensional models. Societies in the industrialized West, and other similar societies such as Australia, are seen as prototypically individualistic. Societies in the East, industrialized or not, and those that are not considered industrialized or as industrializing, are viewed as prototypically collectivistic.

This portrayal does not do complete justice to the subtleties of either Hofstede's (2001) or Triandis's (1995) positions. The former, for example, writes about six different dimensions relevant to the comparison of different societies, of which individualism versus collectivism is only one, although "the issue addressed by this dimension is an extremely fundamental one, regarding all societies in the world" (Hofstede 2011, p. 11). Hofstede also argued that one can study these constructs as aspects of personality, in which case there is no reason "why individualism and collectivism need to be opposite" (Hofstede 2011, p. 17). Triandis, similarly, noted that these concepts are "ideal types" and that within societies "people sample from both the individualist and collectivist cognitive structures, depending on the situation" (2001, p. 909). Triandis also distinguishes between vertical and horizontal varieties of individualism and collectivism, akin to Hofstede's (2011) dimension of small versus large power distance.

Nonetheless, these subtleties are lost when Hofstede ranks societies by their individualism with a high score meaning low collectivism and vice versa (http://geert-hofstede.com/united-states.html). Similarly, Triandis argued that "at the cultural level…individualism and collectivism are opposite sides of a single dimension" (Triandis 2001, p. 910).

Although the individualism vs. collectivism distinction continues to be widely used in psychology (e.g., Chen 2015; Forbes et al. 2011; Li et al. 2010; Louie et al. 2015; Mesman et al. 2016; Tu et al. 2011; Way and Lieberman 2010; Willis 2012; Wilson and Esteinou 2011), many scholars have critiqued the portrayal of societies being categorized as either individualistic or collectivistic. Probably the most comprehensive critique featured meta-analyses (Coon and Kemmelmeier 2001; Oyserman et al. 2002) that revealed a good deal of within-society variability (including within the United States) in terms of these two constructs as well as cross-society variation. However, scholars whose data appeared in the meta-analysis used different ways of measuring both individualism and collectivism, and Oyserman et al. noted that the results for both concepts were often different depending on the specific items used.

Tamis-Lamonda et al. (2008) provided a different critique, noting that "a dichotomous framework that pits individualism against collectivism, or autonomy against relatedness, is neither accurate nor useful in understanding parents' socialization of their young" (p. 184). For example, in terms of attachment theorizing, a secure base (relatedness, a "collectivistic" value) is considered to be necessary for exploration of the world (autonomy, an "individualistic" value) to occur (Ainsworth 1989; Bowlby 1973). Similarly, in Ryan and Deci's (2008) Social

Determination Theory (SDT), relatedness and autonomy are considered two of the three essential components for good human functioning.

One scholar who has moved the field beyond unidimensional cultural dichotomies is Kağıtçıbaşı (2005, 2009, 2013, 2017). She argued that there is a values orientation and a self-orientation embedded within the individualism–collectivism dimension. The values orientation is reflected in either hierarchical or egalitarian human relations regarding cultural norms and values, whereas the self orientation concerns the degree of distance of interpersonal relationships. She therefore proposed a bidimensional theoretical model to explore relations among sociocultural context, parents' socialization values, and the development of the self (Kağıtçıbaşı 2005). In this model, one dimension is labeled "agency," reflecting the degree of willful functioning, extending from autonomy to heteronomy. The interpersonal dimension reflects the extent to which the self connects to others and ranges from separateness to relatedness. These dimensions are proposed to be orthogonal (independent) and could be positively correlated.

Moreover, Kağıtçıbaşı (2013; Kağıtçıbaşı and Ataca 2005, 2015) argued that the values parents attach to different types of socialization goals and the characteristics parents want for their children are profoundly influenced by their cultural-historical context. Based on studies of parents' values for children in nine societies varying in different levels of economic development, Kağıtçıbaşı distinguished three prototypical models of family interaction dynamics, each of which are comprised of different combinations of characteristics parents would like to see in their children.

The first is a family model which is characterized by intergenerational interdependence. The interdependence of parents and children is ensured by obedience socialization, which requires children to obey rules and follow traditions at both the family and community levels. Children are expected to make a contribution to the family economy and, when they enter adulthood, to take care of their aging parents. It is clear that family members not only materially but also psychologically depend on each other, and individual autonomy is considered a threat to family security. Heteronomous and relational socialization goals are therefore preferred in this type of family model. Kağıtçıbaşı (2009) argued that this family model is predominant in less-developed preindustrial rural areas of traditional societies (termed the "majority world"), and features close-knit extended-family relationships.

The second is the independent family model, which Kağıtçıbaşı (2009) noted is common in affluent and industrialized Western societies. In this type of family model, she argued, family members value clear boundaries between self and others and are relatively independent in both the psychological and material realms. Therefore, socialization strategies encourage children to be independent, self-reliant, and not too closely tied to their parents (Kağıtçıbaşı 2009, 2013), with autonomous and separate socialization goals valued.

The third type is the psychological interdependence model, a synthesis of the first and the second model. Kağıtçıbaşı (2009) held that this model is predominant in parts of majority-world societies, specifically urban centers to which people have moved from rural areas, in which jobs for parents and educational possibilities for their children are both different from those to which they had been accustomed. These changes alter people's lifestyles and patterns of relationships.

Self-agency and autonomy are thus viewed as functional and adaptive but relatedness continues to be highly valued. As the close ties between children and their parents, extended kin, and the community at large do not conflict with the cultivation of self-agency in this model, autonomous and relational socialization goals coexist. Further, children come to be valued not so much for the material benefits they bring, but for their psychological value.

In order to assess the extent of agency and interpersonal distance, Kağıtçıbaşı (2009) developed a measure consisting of three subscales to measure (a) the autonomous self, (b) the related self, and (c) the autonomous-relational self. For the purpose of our critique of this measure, it is necessary to quote in full the way in which she conceptualized it.

> It is possible to use the Relatedness and Autonomy scales, only, and to look at a person's standing on these, such that if she or he gets an above-median score on both scales this would point to an autonomous-related self. A person scoring below the median on both scales would be considered to have a heteronomous-separate self. Higher than median on Relatedness and lower than median on Autonomy would connote a heteronomous-related self, and the reverse would point to an autonomous-separate self. It is important to note here that the two dimensions of interpersonal distance and agency are not confounded in the same measure. Each scale is therefore conceived to be unidimensional with a single factor. Factor analyses confirmed this. (Kağıtçıbaşı 2009, p. 194)

Unfortunately, the only supporting evidence for the factor analyses is an unpublished progress report. More problematic is the fact that there does indeed seem to be some confounding of the two dimensions, specifically that disagreements with some of the items in the Autonomous Self Scale should load on heteronomy but could equally load on relatedness. Many of the items are worded in such a way that respondents who disagree with them (or agree with their reverse-scored counterparts) could as easily value relatedness as heteronomy. This is true, for example, of the item: "People who are close to me have little influence on my decisions" or of the reverse-scored item "I lead my life according to the opinions of people to whom I feel close" (Kağıtçıbaşı 2009, p. 195). Because these items come from the Autonomous Self Scale, scoring below the median is taken as evidence for the "heteronomous self." However, disagreement with the first item and agreement with the second would seem to provide as much evidence for relatedness as heteronomy. A further problem is that it is impossible for individuals to score themselves as both autonomous and heteronomous (or related and separate), depending on the circumstances. To accomplish this, Kağıtçıbaşı would have needed a measure that included four subscales, one to measure each of the four relevant factors, with factor-analysis evidence to support her findings.

The Present Study

Our motivation in this study was therefore to assess whether the four types of parental developmental goals discussed by Kağıtçıbaşı (2009) are related as she had portrayed them. There are reasons to doubt this. As she herself had noted, and as Ryan and Deci (2008) and Tamis-LeMonda et al. (2008) have argued, relatedness is necessary for the development of autonomy. Additionally, promoting independence (i.e., autonomy granting) in children could

promote their respect for parents and thus their willingness to follow their parents' rule, as well as appreciation of the supportive relationship (Soenens et al. 2009).

Moreover, autonomy and heteronomy may not be diametrically opposed, as Kağıtçıbaşı (2009) believed. For example, parents may highly value autonomy in their children in some areas of life but also want their children to follow society's rules and cultural norms. Empirical findings suggest that both in the United States and in Eastern Europe autonomy-loving parents want their children to also be obedient and to follow the rules, depending on the situation (Kohn 1977; Kohn and Slomczynski 1990; Tudge et al. 2000). A study about the development of parental values in Brasil suggests that the importance parents attach to autonomy and heteronomy varies according to the age of the child (Tudge et al. 2013). Therefore, the coexistence of these cultural orientations could be found in all cultures, but the relations between them are dynamic and change depending on the developmental phases, situation, and social contexts (Tamis-Lamonda et al. 2008).

We therefore wanted to ascertain whether a four-factor model might not be more helpful than the two-dimensional orthogonal model proposed by Kağıtçıbaşı (2009). We collected our data from cities in the United States and China because these are the types of countries that from Kağıtçıbaşı's persepective should be prototypically autonomous-separate (the United States) and autonomous-related (China). Although Kağıtçıbaşı did not collect data in China (and, as far as we know, no other scholars have applied her model in China), in terms of rapid industrialization and the movement of many poorly educated families from rural areas to urban centers, China is similar to Turkey, where she developed her ideas and collected data. As Kağıtçıbaşı and Ataca (2005) reported, educated and urbanized parents in Turkey valued not only relatedness but also autonomy for their children, hoping to maximize their success. Earlier generations, however, living in rural areas, were more likely to value relatedness and heteronomy. In other words, in China, as in Turkey, parents who would have traditionally encouraged the development of obedience (heteronomy) and relatedness, are likely to have come to value autonomy more after having moved to cities and experienced the importance of education. Some supportive evidence comes from Liu and colleagues' (Liu et al. 2005) study of Canadian and Chinese mothers' socialization of goal-oriented behaviors, in which the Chinese mothers encouraged their children to engage both in autonomous and affiliative practices. The USA and China therefore should be appropriate countries to provide supporting data for Kağıtçıbaşı's model or to support an alternative, four-factor, model.

We therefore hypothesized that the four-factor model would be confirmed in both Chinese and North American samples. That is, what Chinese and North American parents expected for their adult children would be categorized into related, autonomous, separate, and heteronomous goals. Additionally, we hypothesized that the four factors (i.e., related, autonomous, separate, and heteronomous) were not isomorphic. Specifically, parental autonomous and related goals would be correlated positively with each other. We also expected that autonomous and heteronomous goals would not be two opposite ends of one dimension but positively related constructs.

Method

Pilot Study

To first be tested in a pilot study, we created a scale that would allow participants to respond to questions from four different subscales, none of which is isomorphic with any of the others, to assess related, autonomous, separate, and heteronomous parental goals. Drawing on prior work as potential sources for the items (Kağıtçıbaşı 2009; Keller 2012; Schwartz et al. 2012, 2001), we first generated an item pool for developing the Related Autonomous Separate Heteronomous (RASH: Tudge et al. 2014) scale and examined whether each item addressed important and unique aspect of the factor to which it belonged. For example, we adapted items from relevant subscales of Schwartz's Portrait Values Questionnaire (Schwartz et al. 2001) (e.g., "It is important to him to form his views independently," "It is important to him to maintain traditional values and ways of thinking"). Based on our review of theoretical positions and empirical studies on cultural values and on our experiences with parents' beliefs in different cultures, we generated 42 items relevant to what parents' value for their children in four categories (i.e., related, autonomous, separate, and heteronomous).

In order to ensure that the items were translatable and understandable in a variety of languages (i.e., Chinese, Portuguese, Russian, and Turkish), we started from the outset being cognizant of potential translation issues. It helped that the team of people working on item construction consisted of natives of Brazil, Russia, China, Turkey, and the United Kingdom, and as items were written they were tested for meaning with people from each of these countries.

We used a 9-point Likert scale to assess the level of importance parents attached to each value in the current study. As seen in the Appendix, the scale involves a modification of a 5-point scale. It was anchored by 1 (*Absolutely Not Important*) and 9 (*Supremely Important*), included 3 (*A Little Important*), 5 (*Quite Important*), and 7 (*Important*), and allowed parents to select 2, 4, 6, and 8 if they could not decide between named scores. This approach was adopted because a simulation study indicated that an increase in the number of categories per indicator is likely to decrease the bias estimation of the relation between factors and indicators as the indicators approach continuous variables (Rhemtulla et al. 2012).

The RASH measure was first formally piloted on line, using Amazon Mechanical Turk (MTurk), with a total of 30 items. We requested a sample of parents whose children were aged 7 to 14 and whose native language was English. A total of 322 people participated, and were given $1 each for completion, assuming evidence that completion had been taken seriously.

A second pilot used a sample of 308 undergraduate students—asked to imagine that they had a child about whom they were responding—from a private liberal arts university in the Southeastern United States. The results were very similar to those obtained from MTurk. Confirmatory Factor Analysis (CFA) of both data sets revealed that six items did not load well. These six items were therefore rewritten, and the revised instrument was completed by another set of undergraduate students ($N = 244$), from a neighboring public university, and by parents who were participating in a related study ($N = 209$). CFA revealed reasonably fitting models and indices of reliability for each sample, and we therefore decided to evaluate the RASH in a larger study and assess its utility with samples from the United States and China.

Participants

The current study is a part of a larger project aiming to examine the development of gratitude among 7- to 14-year-olds in different cultures. For the current study we were able to use data collected from some of the parents of these children and adolescents. A total of 1099 parents (464 from a large city in southern China and 635 from a medium-sized city in the southeastern United States) participated in this study. These families were recruited from elementary and middle schools. The sample was diverse in terms of parents' educational levels, working status, and, in the United States, ethnic backgrounds (see Table 1). Although we will refer in this paper to "Chinese" or "U.S." data it is important to recognize that each of our samples is drawn from a single region from one of two large and diverse societies.

Table 1. Parents' Socioeconomic Information

	U.S. (*N* = 635) Frequency (%)	**China (*N* = 464) Frequency (%)**
Educational Levels		
Elementary (<12)	32 (5.8)	37 (8.0)
Middle school (<15)	26 (4.7)	115 (24.8)
Some high school	53 (9.5)	38 (8.2)
Completed high school (19)	63 (11.3)	87 (18.8)
Some college*	117 (21.0)	131 (28.2)
Completed college	163 (29.3)	50 (10.8)
MS or equivalent	68 (12.2)	5 (1.1)
PhD or equivalent	34 (6.1)	1 (0.2)
Total	556	464
Missing	79	0
Working Status		
No	182 (33.6)	117 (27.9)
Part-time	87 (16.1)	31 (7.4)
Full-time	273 (50.3)	271 (64.7)
Total	542	419
Missing	93	45
Ethnic Background		
Black	130 (24.1)	–
White	202 (37.4)	–
Hispanic	122 (22.6)	–
Other	58 (10.7)	–
Bi-racial (White-Black)	23 (4.3)	–
Bi-racial (Black-Hispanic)	3 (0.5)	–
Bi-racial (White-Hispanic)	2 (0.3)	–
Total	540	
Missing	95	

*We used "complete junior college" instead of "some college" in the Chinese version of consent form

Data-Collection Procedures

The RASH was included as part of a parent-consent form that also asked for demographic information regarding both parents and children. The English and Chinese wording went through a combination of back-translation and discussion of meaning, until agreement was reached.

Data-collection procedures were identical across schools but varied across countries. In China, parents who both consented to participate and allowed us to ask their children provided the demographic information, and completed the RASH following parent–teacher conferences. In the United States, parents received the parent-consent form from their children's home-room teachers and those who wished to do so completed the demographic information and the RASH at home. Teachers were given $2 for classroom supplies for each consent form returned, regardless of whether or not parents agreed to participate.

Measures

Demographic Information. This information included child age, gender, and grade (and ethnicity only for children from the United States) and parent gender, education level, occupational status (if working, full- or part-time) and ethnicity (only for parents from the United States). Parents were also asked to indicate whether they were the primary caregiver of their child.

The RASH Scale (Tudge et al. 2014). Parents were asked to rate the importance of each developmental goal for their child when he or she becomes an adult using a 9-point scale. The RASH scale consists of four subscales: *related* (e.g., "How important is it that your child, when becoming an adult, maintains good relationships with many people?"), *autonomous* (e.g., "How important is it that your child, when becoming an adult, tries to reach his or her goals without anyone else's help?"), *separate* (e.g., "How important is it that your child, when becoming an adult, prefers to live alone?"), and *heteronomous* (e.g., "How important is it that your child, when becoming an adult, avoids doing things that other people say are wrong?"). The scale, in its final form, is provided in the Appendix.

Data Analytic Plan. Exploratory factor (EFA) and confirmatory factor analyses (CFA) were conducted to identify and validate the factorial structure of the RASH scale with two independent samples. We first randomly split and then merged the Chinese and the U.S. samples into Subsample 1 ($n = 521$) and Subsample 2 ($n = 571$).

Subsample 1 was used to conduct EFA on the 30-item RASH scale with Mplus 7.4 (Muthén and Muthén 1998–2015). For EFA, an oblique rotation method (Oblique Geomin) was applied, as all components were expected to be related with each other based on our theoretical hypothesis. A list of candidate items for removal then was created based on EFA results of the 30-item model. Items with factor loadings lower than .40 and significant cross-loading onto two or more factors were deleted (Diemer et al. 2018; Worthington and Whittaker 2006). Based on the results of EFA, a confirmatory factor analysis (CFA) was performed in Mplus 7.4 to cross-confirm the factorial structure with Subsample 2. The following indices were used to evaluate the overall model fit (Byrne 2001): a non-significant χ^2 statistic; the comparative fit index (CFI) > .90; the standardized root mean square residual (SRMR) < .10; and the root-mean-square error of approximation (RMSEA) < .05. Given that the sample size of the current study is large ($N = 1099$) and the significance of the χ^2 statistic is sensitive to sample size, we expected that the χ^2 statistic would be significant. Missing data points were addressed by using the full-information maximum-likelihood-estimation method (FIML).

After confirming the fit of the hypothesized four-factor RASH structure with Subsample 2, we next examined the measurement invariance of the RASH scale across the two societies. First, we tested whether the four-factor model adequately fit the data in the Chinese and the United States samples separately. We then used multi-group CFA to sequentially test measurement invariance in configural, metric, scalar, and items' unique variance across the two samples (Brown 2006).

Results

Exploratory Factor Analysis

Results of Bartlett's test of sphericity ($\chi^2 = 3778.52$, $p < .001$, $df = 435$) and the Kaiser–Meyer–Olkin (KMO) measure of sampling adequacy (.85) suggested that correlations between RASH items were strong enough to do factor analyses (Worthington and Whittaker 2006). According to the EFA results, six factors had eigenvalues above 1.00. Because the six-factorial model had factors with only one or two items with loadings above .40, this solution was not taken into consideration. In reviewing the scree plot, there was a distinct bend at the four-factor solution. For the four-factor model, each factor contained items that were conceptually consistent. Guided by the aforementioned standards, we deleted items with factor loadings under .40 and cross loadings onto two or more factors. Model fit indices of the four-factor model were favorable (CFI = .92, RMSEA = .05, SRMR = .04, $\chi^2 = 699.58$, $p < .001$, $df = 321$). Therefore, the four-factor model was determined to be the final EFA model comprised of 15 items.

Table 2. Results of the Confirmatory Factor Analysis

	Overall		**U.S.**		**China**	
	Unstd (*SE*)	**Std**	**Unstd (*SE*)**	**Std**	**Unstd (*SE*)**	**Std**
REL_J	–	.68	–	.73	–	.64
REL_K	0.75 (.07)	.56	0.77 (.08)	.63	0.87 (.10)	.62
REL_T	0.87 (.08)	.60	0.87 (.09)	.69	0.86 (.14)	.54
REL_V	0.82 (.08)	.60	0.82 (.09)	.69	0.78 (.14)	.49
REL_Z	0.92 (.09)	.66	0.87 (.10)	.63	0.85 (.11)	.66
AUT_C	–	.64	–	.72	–	.55
AUT_L	0.92 (.10)	.60	0.94 (.11)	.65	0.81 (.17)	.51
AUT_O	0.97 (.11)	.66	0.92 (.11)	.72	0.96 (.20)	.55
AUT_U	0.76 (.09)	.55	0.68 (.10)	.56	0.99 (.20)	.62
SEP_F	–	.57	–	.68	–	.32
SEP_N	1.52 (.14)	.76	0.83 (.10)	.64	0.75 (.24)	.41
SEP_S	1.35 (.13)	.79	0.90 (.12)	.65	1.26 (.34)	.55
HET_H	–	.73	–	.81	–	.63
HET_I	1.03 (.10)	.70	0.88 (.09)	.70	1.31 (.23)	.75
HET_CC	0.69 (.08)	.48	0.67 (.09)	.52	0.71 (.16)	.40

REL = related subscale; *AUT* = autonomous subscale; *SEP* = separate subscale; *HET* = heteronomous subscale
For the overall model, the correlation between the HET and AUT was .52 ($p < .001$), between HET and SEP was .31 ($p < .001$), between HET and REL was .50 ($p < .001$), between REL and AUT was .40 ($p < .001$), between REL and SEP was .28 ($p < .001$), between AUT and SEP was .26 ($p < .001$)

Confirmatory Factor Analysis

The model derived from EFA was validated using CFA with Subsample 2. The overall fit of the CFA model was good with CFI = .93, RMSEA = .06 (with a 90% confidence interval ranging from .05 to .07), and SRMR = .05. The value of chi-square (215.57, $df = 73$, $p < .05$) was significant which might result from the large sample size ($N = 571$). Factor loadings and standard errors of each item are shown in Table 2. For the overall model, latent variables were positively correlated with each other ($p < .001$).

We further analyzed the Chinese and North American samples separately. The model fit indices for both Chinese (CFI = .92, RMSEA = .06, SRMR = .06, $\chi^2 = 126.74$, $p < .001$, $df = 73$) and North American samples (CFI = .94, RMSEA = .06, SRMR = .05, $\chi^2 = 141.69$, $p < .001$, $df = 73$) were favorable. Results indicated that the four-factor model fits the data well in both Chinese and North American parents when examined as separate groups.

Measurement Equivalence

Table 3 presents tests of measurement invariance of the RASH latent structure in the two samples of Chinese and U.S. parents. The model fit indices of Model 2 versus Model 1 indicated that constraining factor loadings did not significantly worsen the model fit (p of χ^2 change > .05). However, the "scalar invariance versus pattern invariance" line (model 3 vs. model 2) indicated that constraining intercepts of indicators across groups worsened model fit (p of χ^2 change < .05).

Table 3. Tests of Measurement Invariance of the Related Autonomous Separate Heteronomous (RASH) Four-Factor Latent Structure across the Chinese and U.S. Samples

Measurement invariance	**Model fit**						**Nested model comparisons**			
	χ2	***df***	***p***	**CFI**	**RMSEA**	**SRMR**	**Model comparisons**	**χ2diff**	***df***	***p*s**
M1: Form invariance	268.43	146	< .001	.93	.06	.06				
M2: Pattern invariance	280.58	157	< .001	.93	.05	.06	M2 vs. M1	12.15	11	> .05
M3: Scalar invariance	462.79	168	< .001	.84	.08	.09	M3 vs. M2	182.21	11	< .001

N = 571*; χ2diff* = nested χ2 difference; *CFI* = comparative fit index; *RMSEA* = root mean square error of approximation; *SRMR* = standardized root mean square residual

We then compared the relative importance of each type of goal using the means of each factor across groups (Table 4). Chinese parents attached higher value to related and separate goals compared to autonomous and heteronomous goals. North American parents valued related, autonomous, and heteronomous goals similarly, and more so than separate goals. Although the RASH scale did not have scalar invariance, we cautiously compare each subscale's means across the two samples. Surprisingly, related and autonomous goals were equally highly valued by both the Chinese and U.S. parents, and the Chinese parents scored higher on separate goals than did their North American counterparts, which was inconsistent with Kağıtçıbaşı's (2009) hypotheses.

Reliability

The internal consistency of the 15-item RASH was good (Cronbach's α = .98). The reliability of the related, autonomous, separate, and heteronomous subscales was .96, .93, .89, and .92 respectively, suggesting that each subscale of the RASH scale has good internal consistency (Nunnally and Bernstein 1994).

Table 4. Descriptive Statistics of Indicators and the Four-Factor Model of the RASH Scale (N = 1099) for Chinese and U.S. Samples

	U.S.		China	
	Mean	***SD***	**Mean**	***SD***
REL_J	7.27	1.76	7.35	1.77
REL_K	7.95	1.43	7.20	1.61
REL_T	7.38	1.66	7.03	1.78
REL_V	7.20	1.64	7.34	1.71
REL_Z	7.20	1.89	7.67	1.61
Mean REL	7.39	1.25	7.34	1.18
AUT_C	6.18	2.22	5.45	2.19
AUT_L	6.65	2.25	6.90	1.95
AUT_O	5.78	2.02	5.37	2.19
AUT_U	6.82	1.94	6.07	1.89
Mean AUT	6.32	1.63	5.95	1.39
SEP_F	3.50	2.57	5.22	2.50
SEP_N	3.32	2.30	8.04	1.49
SEP_S	4.23	2.48	7.07	1.70
Mean SEP	4.31	2.08	6.79	1.31
HET_H	4.69	2.26	4.26	2.07
HET_I	5.68	2.20	4.22	2.22
HET_CC	5.78	2.23	5.28	2.21
Mean HET	5.53	1.79	4.58	1.64

REL = related subscale; *AUT* = autonomous subscale; *SEP* = separate subscale; *HET* = heteronomous subscale

Discussion and Conclusion

Drawing on Kağıtçıbaşı's (2009) theoretical model, the present study validated the RASH scale and examined its measurement invariance in a sample of Chinese and North American parents. The findings suggest that the RASH scale is a reliable and a theoretically relevant measurement of parental socialization goals. Further, our results suggest that neither relatedness–separation nor autonomy–heteronomy are either dichotomous or orthogonal. This multidimensional perspective of cultural orientation may be more valuable than a unidimensional/dichotomous perspective in understanding both Chinese and U.S. parents' socialization goals, and provides clear implications for current discussions about cultural models and future cultural approaches to parenting and parental development goals.

We found some support for Kağıtçıbaşı's (2009) theory. The Chinese parents, being from an urban center in part of the majority world, positively valued autonomy and relatedness. However, the U.S. parents, being from a society that according to Kağıtçıbaşı should have valued autonomy and separation, also valued autonomy and relatedness highly. This result suggests that the psychological interdependence family model may be more widespread than Kağıtçıbaşı realized. Parents' promotion of autonomy and relatedness allows children to feel a strong sense of agency while at the same time encouraging the development and regulation of relationships with others (Yeh and Yang 2006). These socioemotional abilities are likely to be adaptive and desirable in many societies, not simply those that fall into the relevant quadrant of Kağıtçıbaşı's orthogonal model.

Our finding of a positive association between heteronomy and autonomy also calls into question Kağıtçıbaşı's (2009) theory. That is, these values are not opposites and may not be considered isomorphic, but should be viewed as different concepts. It makes sense that both concepts can be valued by parents, one or other of them being considered more appropriate depending on the children's age and the specific situation. As a number of scholars (e.g., Tamis-Lamonda et al. 2008; Tudge et al. 2013) have argued, the relative value accorded to autonomy and heteronomy are dynamic and change depending on the children's stage of development and the social context. That is, relations among these cultural orientations may not always be conflicting, but could be additive or functionally dependent.

Also casting doubt on Kağıtçıbaşı's theory, the Chinese parents valued separation about as highly as relatedness and autonomy, and did so more than did the U.S. parents. A possible explanation for the positive correlation among Chinese parents in relatedness and separation may be that parents want their adult children to be emotionally related to their families but also attach high values to their children's ability to live independently. It is possible that Chinese parents, particularly parents living in urban areas, feel increased pressure but less ability to help their adult children cope with challenges in their rapidly changing society (Cheng et al. 2008). The Chinese parents in our sample may therefore have considered their child's ability to manage personal issues independently and to live alone as functional in current China. Future studies are needed to replicate these findings.

Our analyses of measurement equivalence revealed that the RASH scale had problems of scalar invariance across the Chinese and North American samples. Therefore, one should be extremely cautious about comparisons across the samples' mean scores. The lack of scalar invariance might be due to differences in parents' educational levels, as the U.S. parents were better educated than were their Chinese counterparts. Another possible explanation is that informants in different cultures may have different response styles when answering surveys regarding their parenting beliefs and socialization goals (Lamm and Keller 2007).

There were several limitations of the current study. First, perhaps most importantly, our data were gathered in just one city from each of two large and diverse societies and cannot be generalized beyond those cities. Second, our U.S. sample was ethnically diverse, but we did not have large enough subsamples to allow us to take into consideration parents' ethnicity, although there is reason to believe that parental socialization values differ across ethnic groups in the United States (Oyserman et al. 2002). Thus, future studies could replicate this study with ethnically and geographically diverse samples. Third, we were not able to test the criterion-related validity (i.e., concurrent and predictive validity) of the RASH scale as we had not collected data on any other related measures from the parents who participated in this study. Further research will be necessary to assess the concurrent and predictive validity of the RASH.

Nonetheless, we believe that this scale has considerable promise for assessing the central constructs of Kağıtçıbaşı's (2009) theory, particularly as it allows parents to respond to each of the constructs separately rather than forcing a high score on one to signify a low score on another. It thus may allow scholars to ascertain whether autonomy and relatedness is more ubiquitous than Kağıtçıbaşı had argued, while simultaneously casting further doubt on the individualism-collectivism dichotomy.

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Appendix

We would like to know which of the following characteristics are important for your child **when he or she has become an adult**. There are no right or wrong answers. We need your personal opinion. Please look at the questions in the table below, and answer each question, one by one, giving your response from 1 to 9. Your choices are:

1 = Absolutely Not Important; 2; 3 = A Little Important; 4; 5 = Quite Important; 6; 7 = Important; 8; 9 = Supremely Important. For example, if you value a characteristic between 7 (Important) and 9 (Supremely Important) you can mark 8; if you can't decide between 5 (Quite Important) and 7 (Important) you can mark 6.

How important is it that your child, when an adult...

C. ... tries to reach his or her goals without anyone else's help?
F. … likes to live without many ties to others?
H. … does things in traditional ways?
I. … does the things that other people expect of him or her?
J. ... maintains good relationships with many people?
K. ... cares about others' feelings?
L. … tries not to depend on someone else to achieve his or her goals?
N. ... prefers to live alone?
O. … typically decides on a course of action without help from others?
S. ... keeps personal issues to himself or herself?
T. … is loyal to his or her friends?
U. … makes decisions about what to do without being influenced by others' opinions?
V. ... feels well connected to other people?
Z. … is well connected to the extended family (grandparents, aunts, cousins, etc.)?
CC. … avoids doing things that other people say are wrong?

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